State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient

To: OFFICE CHIEFS
Structure Design
Structure Design Services &
Earthquake Engineering

Date: September 23, 2003

File:

From: RICHARD D. LAND
Deputy Division Chief
Structure Design
Division of Engineering Services

Subject: Caltrans Bridge Design Specifications, Section 2.7.3.2.1

In April 2000 release of the Caltrans Bridge Design Specifications, Section 509.3 of the 1998 California Building Code was used as a guide to establish the maximum penetration opening within the bottom 27 inches of the railing assembly. After further comparison, and review of other codes such as the *AASHTO 2000 Standard Specifications for Highway Bridges* and ASTM E985, it has been determined that the maximum opening in the bottom 27 inches of the railing assembly should be 6 inches in accordance with those other codes.

Section 2.7.3.2.1 should read as follows:
"The minimum height of a pedestrian railing shall be 42 inches measured from the top of the walkway to the top of the upper rail member. Within a band bordered by the walkway surface and a line 27 inches above it, all elements of the railing assembly shall be spaced such that a 6-inch sphere will not pass through any opening. For elements between 27 and 42 inches above the walking surface, elements shall be spaced such that an 8-inch sphere will not pass through any opening."

An update to the Caltrans Bridge Design Specifications Manual will be sent out in the near future.

c: Robert L. Buckley
Rob Stott
Roberto Lacalle